Work Order ID 79680 Duplicate *79680*

May-30-12 3:57:21 PM

Item ID: D212-664-207TRN **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Crosstube Turning Detail

Start Date: 31/01/2012 **Start Qty:** 1.00 *1* **Cust Item ID:**

Required Date: 02/02/2012 **Req'd Qty:** 1.00 *1* **Customer:**

Reference:

Run Start *NR1*

Approvals: **Process Plan:** MLJ **Date:** 12/05/31 **Tooling:** **Date:**

Stop *NR2*

QC: **Date:** **SPC (Y/N):** **Date:**

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
100 *100* Mori Seiki	MORI SEIKI CNC LATHE LARGE	0.00				1	Ø		mmL 12/06/22
Mori Seiki CNC Lathe Large	Memo 1-Fill tube with sand & install plugs DT8534 on both ends as per Folio FA706 2-Turn first side as per Folio FA706 3- File transition lines smooth. FOLIO REV: A DWG REV: B	0.00							
110 *110* QC	QC1- Inspect dimensions to dimension sheet	0.00				1	Ø		mmL 12/06/22
Quality Control	Memo	0.00							

Draw Nbr	Revision Nbr
D212-664-247	Rev B (DEO)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ____________________ PAR #: _______ Fault Category: __________________ NCR: Yes No DQA: _____ Date: _________

Resolution: ____________________ Disposition: ____________________ QA: N/C Closed: __________ Date: _________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 79680 *79680*

May-30-12 3:57:21 PM

Item ID: D212-664-207TRN **Accept** *N900040100* **Setup Start** *NS1* **Stop** *NS2*

Revision ID:

Item Name: Crosstube Turning Detail

Start Date: 31/01/2012 **Start Qty:** 1.00 *1* **Cust Item ID:**

Required Date: 02/02/2012 **Req'd Qty:** 1.00 *1* **Customer:**

Reference:

Approvals: **Process Plan:** **Date:** **Tooling:** **Date:** **Run Start** *NR1*

QC: **Date:** **SPC (Y/N):** **Date:** **Stop** *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* Mori Seiki Mori Seiki CNC Lathe Large	MORI SEIKI CNC LATHE LARGE	0.00				1	Ø	KC	12-6-23
	Memo 1-Turn second side as per Folio FA706 2- File transition lines smooth. 3-Remove sand and plugs FOLIO REV: AH DWG REV: B	0.00							
130 *130* QC Quality Control	QC1- Inspect dimensions to dimension sheet	0.00				1	Ø	KC	12-6-23
	Memo	0.00							
140 *140* QC Quality Control	QC8- Inspect parts - second check	0.00				DP 12-6-26			
	Memo	0.00							

Dart Aerospace Ltd

W/O:	WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ____________ **PAR #:** ______ **Fault Category:** ____________ **NCR:** Yes No **DQA:** _____ **Date:** ________

Resolution: ____________ **Disposition:** ____________ **QA: N/C Closed:** ________ **Date:** ________

NCR:	WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 79680

May-30-12 3:57:21 PM

79680

Item ID: D212-664-207TRN

Accept *N900040100*

Setup **Start** *NS1*

Revision ID:

Item Name: Crosstube Turning Detail

Stop *NS2*

Start Date: 31/01/2012 **Start Qty:** 1.00 *1*

Required Date: 02/02/2012 **Req'd Qty:** 1.00 *1*

Cust Item ID:

Customer:

Reference:

Run **Start** *NR1*

Stop *NR2*

Approvals: **Process Plan:** **Date:** **Tooling:** **Date:**

QC: **Date:** **SPC (Y/N):** **Date:**

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
145 *145* Crosstubes		0.00							
Crosstubes	**Memo** GRIND ONLY TRANSITION LINES SMOOTH LONGITUDE WAY.	0.00				JW		12-6-27	
150 *150* HandFXtube	Crosstubes Chemical Conversion N/A	0.00							
Hand Finishing Crosstubes	**Memo**	0.00							P/o
160 *160* QC	QC3- Inspect Part Finish	0.00							
Quality Control	**Memo**	0.00							

Dart Aerospace Ltd

W/O: 79680 Rem. Drag		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
12/06/27	150/160	Renumber #150 + #160. Due to corrosion					S 12/06/27
		ADD step after #140 to ACID etch ... of tube ... See B 79675					S 12/06/27

Part No: D212-664-207TRN PAR #: ______ Fault Category: ______ NCR: Yes No DQA: ______ Date: ______

Resolution: ______ Disposition: ______ QA: N/C Closed: ______ Date: ______

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B: Initial Chief Eng	Action Description Chief Eng	Sign & Date	Verification Section C	Approval Chief Eng	Approval QC Inspector

NOTE: Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

Work Order ID 79680

May-30-12 3:57:21 PM

79680

Item ID: D212-664-207TRN

Accept *N900040100*

Setup **Start** *NS1*

Revision ID:

Item Name: Crosstube Turning Detail

Stop *NS2*

Start Date: 31/01/2012 **Start Qty:** 1.00 *1*

Cust Item ID:

Required Date: 02/02/2012 **Req'd Qty:** 1.00 *1*

Customer:

Reference:

Run **Start** *NR1*

Approvals: **Process Plan:** **Date:** **Tooling:** **Date:**

QC: **Date:** **SPC (Y/N):** **Date:**

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170 *170* Packaging Packaging	Packaging	0.00							
	Memo Identify and stock in kanban rack Location: LV	0.00	MO			12-6-27			
180 *180* QC Quality Control	QC21- Final Inspection - Work Order Release	0.00							
	Memo	0.00							12/6/28

JMC
12-06-27

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ____________________ **PAR #:** _______ **Fault Category:** __________________ **NCR:** Yes No **DQA:** _____ **Date:** _________

Resolution: ____________________ **Disposition:** ____________________ **QA: N/C Closed:** __________ **Date:** _________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
			Corrective Action Section B					
DATE	STEP	Description of NC Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Verification Section C	Approval Chief Eng	Approval QC Inspector

NOTE: Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

Picklist Print

May-30-12 3:57:24 PM

Work Order ID: 79680 *79680*

Parent Item: D212-664-207TRN *D212-664-207TRN*

Parent Item Name: Crosstube Turning Detail

Start Date: 31/01/2012 **Required Date:** 02/02/2012

Start Qty: 1.00 **Required Qty:** 1.00

Comments: IPP Rev:A New Issue 08-03-06 DD verified by:ec
IPP Rev B 08.04.02 Removed polish EC verified DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6008-132 *D6008-132* Crosstube extrusion		Manufactured	No			110	Each	0.0000	1 **	1			

D6008-180

B59249 1 [illegible] 12/06/22

Dart Aerospace Ltd

W/O:	WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ________________ **PAR #:** ______ **Fault Category:** ______________ **NCR:** Yes No **DQA:** _____ **Date:** _________

Resolution: ______________ **Disposition:** ______________ **QA: N/C Closed:** _________ **Date:** _________

NCR:	WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	79680
Description: Crosstube Assembly (205/212 Low Aft)	Part Number:	D212-664-247
Inspection Dwg: D212-664-247 Rev: B		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

	Inspection Sheet Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
SIDE A	0.438	+/-0.010	.438	✓		VERN	CNC 08
	2.680	+0.005/-0.000	2.681	✓			
	2.680	+0.005/-0.000	2.685	✓			
	2.687	+0.005/-0.000	2.692	✓		↓	↓
	2.802	+0.005/-0.000	2.807	✓			
	2.906	+0.005/-0.000	2.911	✓			
	3.009	+0.005/-0.000	3.013	✓			
	3.112	+0.005/-0.000	3.115	✓			
	3.250	+0.005/-0.000	3.250	✓			
SIDE B	0.438	+/-0.010	.438	✓		VERN	CNC 08
	2.680	+0.005/-0.000	2.679	✓			
	2.680	+0.005/-0.000	2.681	✓			
	2.687	+0.005/-0.000	2.690	✓		↓	↓
	2.802	+0.005/-0.000	2.805	✓			
	2.906	+0.005/-0.000	2.910	✓			
	3.009	+0.005/-0.000	3.013	✓			
	3.112	+0.005/-0.000	3.116	✓			
	3.250	+0.005/-0.000	3.250	✓			
	128.268	+/-0.030	128.260	✓		tape	LG-25

Measured by:	[signature]	Audited by:	[signature]	Preliminary Approval:	N/A
Date:	12/06/22	Date:	12-6-26	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	08.11.07	New Issue (P/O D212-664-207)	KJ/EC	
B	10.04.01	Dwg Rev updated	KJ	
C	10.08.03	Dimension 128.268 was 128.27	KJ [signature]	[signature]

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ____________________ **PAR #:** _______ **Fault Category:** ____________________ **NCR:** Yes No **DQA:** _____ **Date:** _________

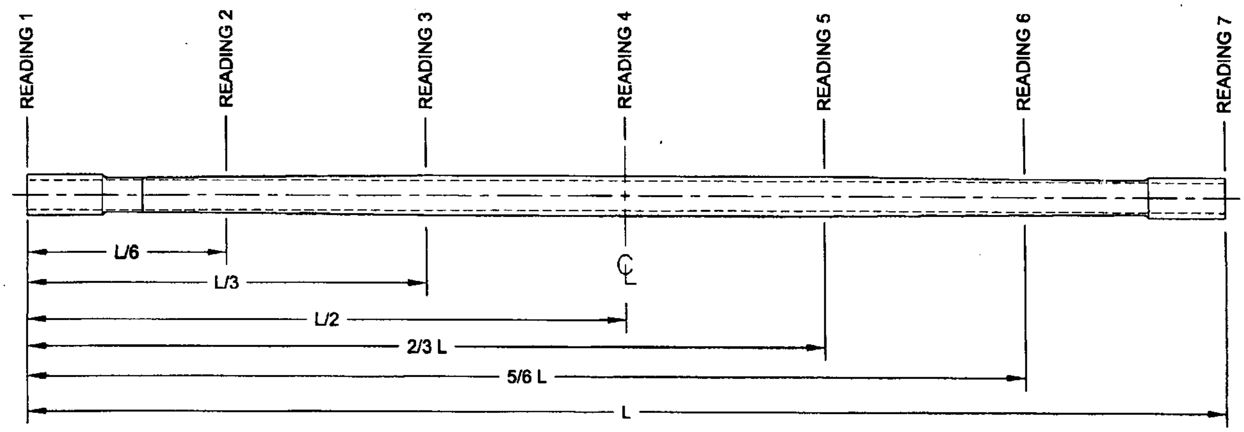
Resolution: ____________________ **Disposition:** ____________________ **QA: N/C Closed:** __________ **Date:** _________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	79680
Description: Crosstube Assembly, Mid Aft	**Part Number:**	**D206-667-247TRN**
Inspection Dwg: D206-667-247 **Rev:** A		**Page 2 of 2**

WALL THICKNESS MEASUREMENT



Location	WALL THICKNESS MEASUREMENT (IN)				Deviation Δw (max-min)	TOLERANCE
	w1	w2	w3	w4		
READING 1 L= 0" cuff	.154	.155	.150	.150	.005	0.045"
READING 2 L= 32"	.294	.299	.319	.311	.025	
READING 3 L= 16"	.160	.165	.176	.168	.016	
CL READING 4 L= 64.125	.439	.439	.440	.445	.006	
READING 5 L= 16"	.143	.151	.188	.182	.045	
READING 6 L= 32"	.287	.304	.320	.306	.033	
READING 7 L= cuff	.154	.146	.150	.157	.011	

Calibration Result

Actual Block Thickness: ________

Sitescan 250 Measured Thickness: ________

Measured by:	gman. L	**Audited by:**	[signature]	**Preliminary Approval:**	
Date:	12/06/26	**Date:**	12-6-26	**Date:**	

Rev	Date	Change	Revised by	Approved
A	11.06.21	New Issue	KJ	
B	12.02.02	Dimension 4.438 was 4.500	KJ	
C	12.06.01	Wall thickness form added	KJ [signature]	[signature]

Item	Qty -247	Qty -247B	Part Number	Description
1	X		D212-664-247	**CROSSTUBE ASSEMBLY (205/212 LOW AFT)**
2		X	D212-664-247B	**CROSSTUBE ASSEMBLY (214 LOW AFT)**
3	1	1	D6008-132	CROSSTUBE
4	2	2	D2940-1	SUPPORT
5	4	4	D3595-063-530	RUBBER CUSHION
6	2	2	D3660-1	CUFF
7	4	4	MS21920-28	CLAMP (OR MS21920-30)
8	44	44	CR3212-4-06	RIVET (OR M7885/3-4-06)
9	A/R	A/R	MAGNOBOND 6398	ROCKWELL SPECIFICATION RBO-120-023 ADHESIVE (TEXTRON/BELL SPEC. 299-947-100, TYPE II, CLASS 2 ADHESIVE)
10	A/R	A/R	SIKAFLEX-241/-291	SEALANT (OR PROSEAL 890 OR MIL-S-8802 CLASS B2 SEALANT)

GENERAL NOTES:

1) MATERIAL: MANUFACTURED FROM D6008-132
FINISHED LENGTH = 128.268±0.020 (BEFORE BENDING/TRIMMING)
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
PAINT OUTSIDE PER DART QSI 005 4.2
3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
4) UNITS: INCHES UNLESS OTHERWISE NOTED.
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX.
6) IDENTIFICATION: SCRIBE DART PART NUMBER "D212-664-XXX" AND BATCH NUMBER ON INSIDE OF CUFF USING VIBRATING STYLUS.
7) WEIGHT: D212-664-247 = 36.6 lbs (PER IIN-D212-664)
D212-664-247B = 36.6 lbs (PER IIN-D212-664)
8) PART IS SYMMETRIC ABOUT CENTERLINE.
9) WHEN MACHINING TAPER, RUN CUTTER OFF PART. BLEND OUT EDGE LONGITUDINALY, TRANSITION SHOULD BE SMOOTH.
10) BEND PROGRESSIVELY WITH A MINIMUM OF 8 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS 6% BASED ON O.D., EXCEPT UP TO 10% IS ALLOWED IN AREA NOTED.
11) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038.
12) INSTALL D2940-1 SUPPORT USING 0.03" TO 0.06" THICK LAYER OF MAGNOBOND 6398 TO THE SURFACE OF D2940-1 THAT WILL BE IN CONTACT WITH THE CROSSTUBE PER QSI 015. LET CURE FOR 12 HOURS AFTER INSTALLATION AND PRIOR TO PACKAGING.
13) INSTALL MS21920-28 CLAMPS (OR -30) WITH D3595-063-530 RUBBER CUSHIONS TO SECURE THE D2940-1 SUPPORT ON TOP SIDE OF THE CROSSTUBE. ENSURE CLAMPS ARE OPPOSITE OF CROSSTUBE SUPPORT.
14) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
15) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING.
16) INSTALL D3660-1 CUFF AFTER CHEMICAL CONVERSION COAT BUT BEFORE PAINT, WITH A LAYER OF SIKAFLEX-241/-291 OR PROSEAL 890 OR MIL-S-8802 CLASS B2 SEALANT BETWEEN CUFF AND CROSSTUBE. SEAL EDGE OF CUFF TO ENSURE NO GAPS.
17) TOUCH-UP HOLES WITH CHEMICAL CONVERSION COAT.

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 79680 MW
12/05/31

DEO ATTACHED

DEO# 11-614
11.07.28

UNDER REVIEW

RELEASED
2009-10-29

REV.	DESCRIPTION	BY	DATE
B	REVISE GENERAL NOTES/PART LIST; UPDATE TO CURRENT STANDARDS; ADD -247B (ZN C4-2, D5-2)	RF	09.09.30
A	NEW ISSUE	CP	07.07.07

DESIGN		**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA
DRAWN	RF	
CHECKED		DRAWING NO. D212-664-247 — REV. B — SHEET 1 OF 4
MFG. APPR.		
APPROVED		TITLE CROSSTUBE (205/212 LOW AFT) — SCALE NTS
DE APPR.		
DATE	09.09.30	

Dart Aerospace Ltd

W/O:	WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

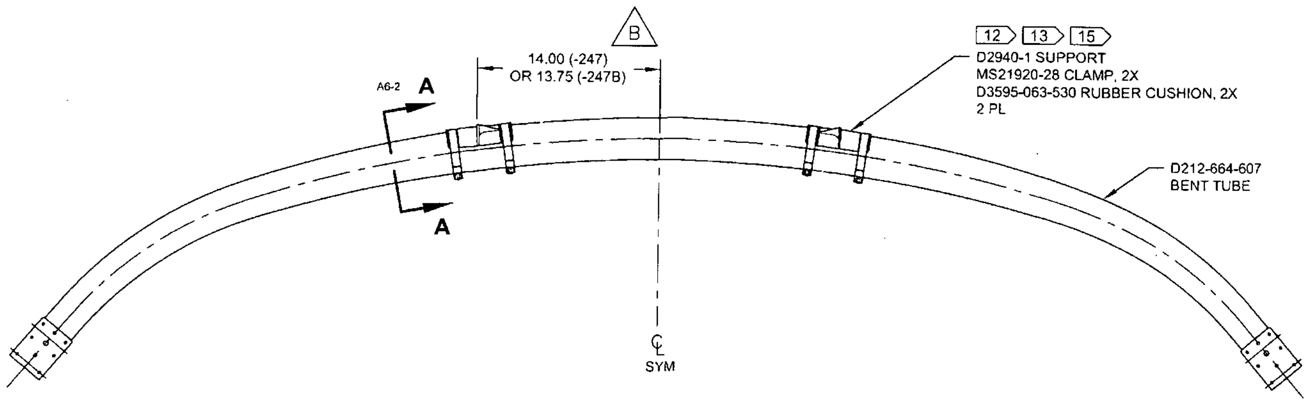
Part No: ____________ **PAR #:** ______ **Fault Category:** ____________ **NCR:** Yes No **DQA:** _____ **Date:** ________

Resolution: ____________ **Disposition:** ____________ **QA: N/C Closed:** ________ **Date:** ________

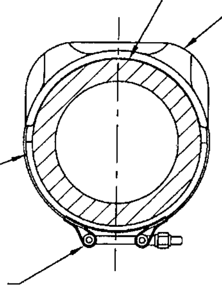
NCR:	WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

79680



D212-664-247/-247B
ASSEMBLY DETAIL (B)



SECTION A-A D6-2
SCALE 4X

DEO ATTACHED

DCN # 11.64
11.07.28

UNDER REVIEW
11.04.13

RELEASED
2009-10-29

DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED		DRAWING NO. D212-664-247	REV. B SHEET 2 OF 4
MFG. APPR.			
APPROVED		TITLE CROSSTUBE (205/212 LOW AFT)	SCALE NTS
DE APPR.			
DATE	09.09.30		

Dart Aerospace Ltd

W/O:	WORK ORDER CHANGES						
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

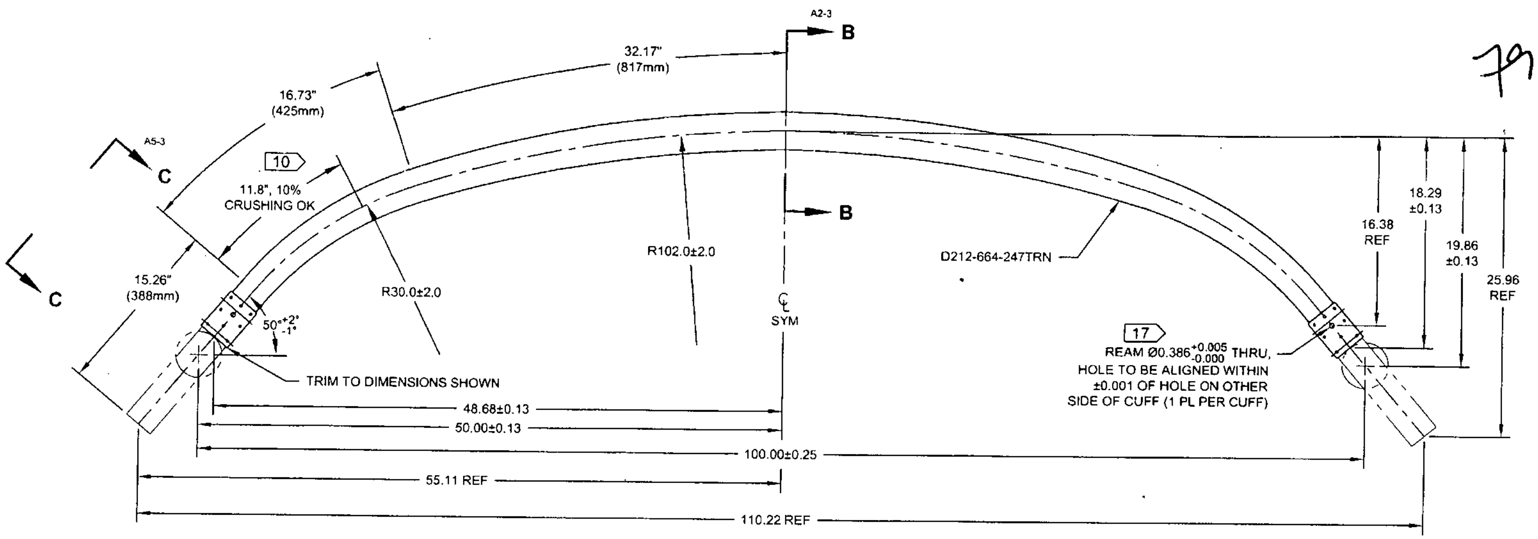
Part No: ____________ **PAR #:** ______ **Fault Category:** ____________ **NCR:** Yes No **DQA:** _____ **Date:** ________

Resolution: ____________ **Disposition:** ____________ **QA: N/C Closed:** ________ **Date:** ________

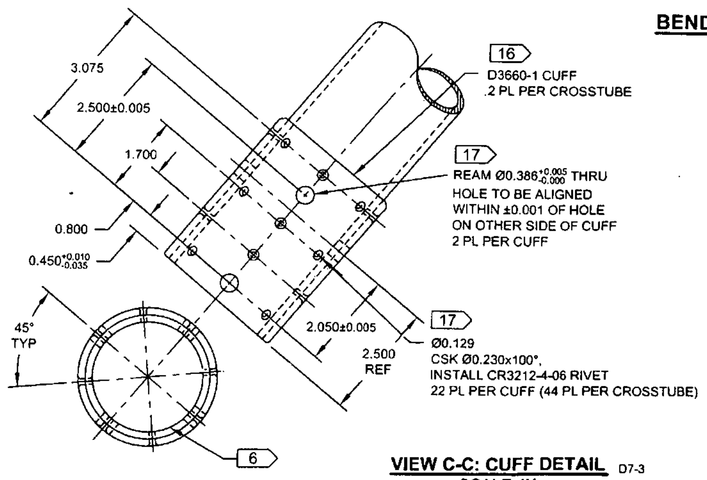
NCR:	WORK ORDER NON-CONFORMANCE (NCR)							
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

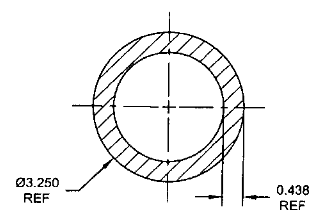
79680



D212-664-607
BENDING AND DRILLING DETAIL 10 B



VIEW C-C: CUFF DETAIL D7-3
SCALE 4X



SECTION B-B D4-3
SCALE 4X

DEO ATTACHED

UNDER REVIEW
11.06.13

RELEASED
2009 -10- 29

DESIGN		**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D212-664-247	SHEET 3 OF 4
APPROVED		TITLE	SCALE
DE APPR.		CROSSTUBE (205/212 LOW AFT)	NTS
DATE	09.09.30		

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ____________________ **PAR #:** _______ **Fault Category:** __________________ **NCR:** Yes No **DQA:** _____ **Date:** _________

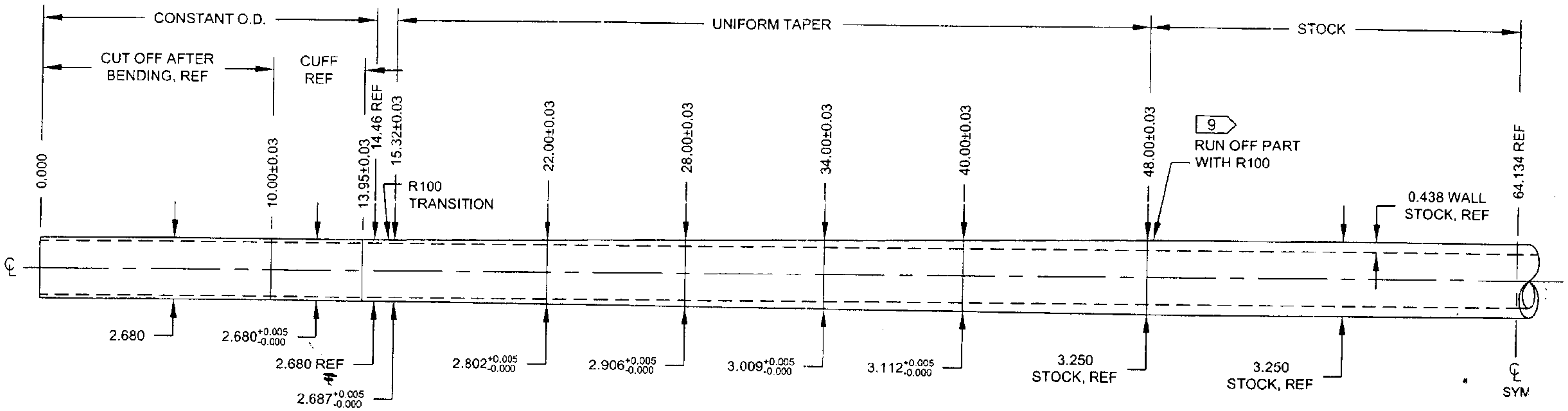
Resolution: ___________________ **Disposition:** ____________________ **QA: N/C Closed:** _________ **Date:** _________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
			Corrective Action Section B					
DATE	STEP	Description of NC Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Verification Section C	Approval Chief Eng	Approval QC Inspector

NOTE: Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

79680



D212-664-247TRN
TURNING DETAIL

DEO ATTACHED
DEO #11-6 14
11.07.28

UNDER REVIEW
11.06.13

RELEASED
2009-10-29

DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED		DRAWING NO. D212-664-247	REV. B SHEET 4 OF 4
MFG. APPR.			
APPROVED		TITLE CROSSTUBE (205/212 LOW AFT)	SCALE NTS
DE APPR.			
DATE	09.09.30		

Dart Aerospace Ltd

W/O:	WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ______________ **PAR #:** _______ **Fault Category:** ______________ **NCR:** Yes No **DQA:** _____ **Date:** _________

Resolution: ______________ **Disposition:** ______________ **QA: N/C Closed:** __________ **Date:** _________

NCR:	WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

DRAWING NO. D212-664-247	TITLE CROSSTUBE ASS'Y (205 LOW AFT) REV. B	DART AEROSPACE LTD ENGINEERING ORDER	D.E.O. NO. D212-664-247-B-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN	CHECKED ASS	MFG. APPR.	APPROVED	DE APPR.	
DATE 11.07.15	DATE 11.07.20	DATE 11.07.21	DATE 11/07/21	DATE 11.07.21	

PURPOSE:
REPLACE MAGNOBOND WITH PROSEAL.

79680

CHANGE:

IS:

Item	Qty -247	Qty -247B	Part Number	Description
9	A/R	A/R	PROSEAL 890 B-2	SEALANT, AMS-S-8802 CLASS B-2

WAS:

Item	Qty -247	Qty -247B	Part Number	Description
9	A/R	A/R	MAGNOBOND 6398	ROCKWELL SPECIFICATION RBO-120-023 ADHESIVE (TEXTRON/BELL SPEC. 299-947-100, TYPE II, CLASS 2 ADHESIVE)

NOTE 12 & 15, SHEET 1 IS AMENDED AS FOLLOWS:

IS:

12) TO INSTALL D2940-1 SUPPORT: ABRADE MATING SURFACE OF SUPPORT AND CROSSTUBE WITH 180-GRIT SANDPAPER AND REMOVE RESIDUE WITH MEK (OR EQUIVALENT). APPLY A 0.04" TO 0.07" THICK LAYER OF PROSEAL 890 CLASS B-2 (OR AMS-S-8802 CLASS B-2) SEALANT TO MATING SURFACE OF SUPPORT.

15) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING. **PRIOR TO PACKAGING, RE-CHECK TORQUE ON CLAMPS AFTER PROSEAL 890 SEALANT HAS CURED FOR 72 HOURS.**

WAS:

12) INSTALL D2940-1 SUPPORT USING 0.03" TO 0.06" THICK LAYER OF MAGNOBOND 6398 TO THE SURFACE OF D2940-1 THAT WILL BE IN CONTACT WITH THE CROSSTUBE PER QSI 015. LET CURE FOR 12 HOURS AFTER INSTALLATION AND PRIOR TO PACKAGING.

15) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING.

RELEASED 2011-07-28

Dart Aerospace Ltd

W/O:	WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ________ **PAR #:** ________ **Fault Category:** ________ **NCR:** Yes No **DQA:** ______ **Date:** ________

Resolution: ________ **Disposition:** ________ **QA: N/C Closed:** ________ **Date:** ________

NCR:	WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries